ECONOMIC RESEARCH SERVICE

FY 1999 AND FY 2000 ANNUAL PERFORMANCE PLANS

The Economic Research Service (ERS) was established in 1961 from components of the former Bureau of Agricultural Economics principally under the authority of the Agricultural Marketing Act of 1946 (7 U.S.C. 1621-1627). ERS's portfolio was expanded to include international work with the addition of country specialists from the Office of Foreign Agricultural Relations. ERS performs work under one appropriation item--economic analysis and research.

The mission of the Economic Research Service is to provide economic analysis on efficiency, efficacy, and equity issues related to agriculture, food, natural resources, and rural development to improve public and private decision making.

Activities to support this mission and the following goals involve research and development of economic and statistical indicators on a broad range of topic including, but not limited to global marketing conditions, trade restrictions, agribusiness concentration, farm and retail food prices, food assistance, food borne illnesses, food labeling, nutrition, worker safety, agrichemical usage, livestock waste management, conservation, sustainability, genetic diversity, technology transfer, biofuels, rural infrastructure, and agricultural labor. Research results and economic indicators on such important agricultural, food, natural resource, and rural issues will be fully disseminated to public and private decision makers through published and electronic reports and articles; special staff analyses, briefings, presentations, and papers; data bases; and individual contacts. Through such activities, ERS provides public and private decision makers with economic and related social science information and analysis that helps them attain the goals that promote agricultural competitiveness, food safety and security, a well nourished population, environmental quality, and a sustainable rural economy. More information on ERS's program is contained in the ERS Strategic Plan.

Goal 1: The agricultural production system is highly competitive in the global economy.

Objective: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues involved in ensuring that the U.S. food and agriculture sector effectively adapts to changing market structure, domestic policy reforms, and post-GATT and post-NAFTA trade conditions.

Program Activity: Economic Analysis and Research

	FY 1997	FY 1998	FY 1999	FY 2000
Funding (in thousands of dollars)	20,918	20,918	20,606	21,810
FTEs	224	218	206	206

	FY 1997	FY 1998	FY 1999	FY 2000
PERFORMANCE GOAL AND INDICATORS				
Provide policy makers, regulators, program managers, and organizations shaping public debate with timely and high quality analyses of the economic issues affecting U.S. food and agriculture sector's competitiveness including factors related to performance, structure, risk and uncertainty, marketing, and market and non-market trade barriers.				
Major reports, articles, papers, and briefings produced (no.)	175	143	145	145
Published research meets peer review standards (percent)	100	100	100	100
Requested analyses delivered by deadline (percent)	83	87	95	95

Discussion of Performance Goal: Achievement of this performance goal supports the achievement of USDA goal 1--Expand economic and trade opportunities for agricultural producers and other rural residents. The ERS performance plan specifies parallel quantitative indicators for each of its performance goals. ERS will also use narratives in its annual performance report to demonstrate how ERS outputs enhanced understanding of economic issues related to agricultural competitiveness. Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Means and Strategies: To meet this performance goal, ERS will: identify key economic issues relating to the competitiveness of U.S. agriculture; use sound analytical techniques to understand the immediate and broader economic and social consequences of alternative policies and programs and changing macroeconomic and market conditions on U.S. competitiveness; and effectively communicate research results to policy makers, program managers, and those shaping the public debate regarding U.S. agricultural competitiveness.

Because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies are extensive and complicated. ERS's unique contribution is provision of *external economic analysis*. One example regarding this goal is ERS's close work with the Foreign Agricultural Service, World Agricultural Outlook Board, and the U.S. Office of the Special Trade Representative to analyze the international agriculture and trade effects of Uruguay Round and other existing and proposed agreements.

The necessary resources for FY 2000 include an increase of $350,000 to organize and lead an interagency research activity to comprehensively assess the Department's role in providing analytically-based information on

agricultural markets to small, limited resource, and socially disadvantaged farmers. Research will be primarily extramural; no additional staff years are requested.

The necessary resources for FY 2000 also include an increase of $854,000 to undergird the Agency's program of work in commodity market analysis to assure the maintenance of sufficient capacity to analyze the structure and performance of commodity markets in a dynamic era, lend that analytical expertise to Departmental commodity forecasting and projections activities, and enhance the dissemination of market analytical information and its underlying data to producers, processors, traders, and other sellers who rely upon its availability. Research will be primarily extramural; no additional staff years are requested.

Note that the effect of budget increases and decreases on output indicators occurs primarily in years after the budget change occurs. Research is not an instantaneous process. Lags develop as expanded research will require additional and sometimes new data, improved analytical methods, application of the methods, interpretation of the results, and thorough peer review of the new results before their release. Thus increased outputs from the FY 2000 initiatives will occur in succeeding years.

Verification and Validation: Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Goal 2: The food production system is safe and secure.

Objective: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of economic issues involved in improving the efficiency, efficacy, and equity of public policies and programs designed to protect consumers from unsafe food.

Program Activity: Economic Analysis and Research

	FY 1997	FY 1998	FY 1999	FY 2000
Funding (in thousands of dollars)	2,881	2,881	3,291	3,744
FTEs	31	30	36	36

	FY 1997	FY 1998	FY 1999	FY 2000
PERFORMANCE GOAL AND INDICATORS				
Provide policy makers, regulators, program managers, and organizations shaping public debate with timely and high quality analyses of economic issues affecting the safety of the U.S. food supply including the efficacy, efficiency, and equity of alternative policies and programs designed to protect consumers from unsafe food.				
Major reports, articles, papers, and briefings produced (no.)	50	46	55	60
Published research meets peer review standards (percent)	100	100	100	100
Requested analyses delivered by deadline (percent)	86	93	95	95

Discussion of Performance Goal: Achievement of this performance goal supports the achievement of USDA goal 2.2--Reduce the incidence of food borne illness and ensure that commercial food supplies are safe and wholesome. The ERS performance plan specifies parallel quantitative indicators for each of its performance goals. ERS will also use narratives in its annual performance report to demonstrate how ERS outputs enhanced understanding of economic issues related to food safety. Please see discussion of ERS performance indicators verification and validation at the end of the plan. Note that quantitative effect of an initiative on output indicators occurs primarily in years after the first year of the initiative as the results from expanded research program become available.

Means and Strategies: To meet this performance goal, ERS will: identify key economic issues relating to protecting consumers from unsafe food; use sound analytical techniques to understand the immediate and long term efficiency, efficacy, and equity consequences of alternative policies and programs aimed at providing a safe food supply; and effectively communicate research results to policy makers, program managers, and those shaping efforts to protect consumers from unsafe food. Because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies are extensive and complicated. For example, ERS cooperates with the Agricultural Research Service (ARS), Food Safety and Inspection Service (FSIS), Centers for Disease Control and Prevention, Agricultural Marketing Service (AMS), and Grain Inspection, Packers, and Stockyards Administration on the pathogen reduction efforts, which includes Hazard Analysis and Critical Control Points (HACCP). ERS's unique contribution is provision of *external economic analysis*. ERS's research also contributes to the zoonotic portion of the Emerging Infection Diseases crosscut as ERS improves estimates of the costs and benefits of programs to deal with new and emerging microbial pathogens.

The ERS FY 1999 budget contains a $453,000 increase to support USDA's food safety initiative. The increase will enable ERS to improve estimates of the costs of food borne illnesses, improve assessment of risks from unsafe foods, and aid more cost effective targeting of consumer education efforts regarding food borne illnesses. Research is primarily extramural; no additional staff years were requested.

The necessary resources for FY 2000 include an increase of $453,000 for ERS's expanded support of the interdisciplinary effort under the President's Food Safety Initiative. ERS will work with scientists to bring a systems view to analyses of options for pathogen control from farm-to-table that will provide economic analysis to determine which controls are most cost-effective. ERS staff will work with staff at the Food and Drug Administration, Center for Disease Control, and other USDA agencies. Analyses will include evaluation of risk-reduction strategies targeted at fruits and vegetables under the Produce and Imported Food Safety Initiative. Research will be primarily extramural; no additional staff years are requested.

Note that the effect of budget increases and decreases on output indicators occurs primarily in years after the budget change occurs. Research is not an instantaneous process. Lags develop as expanded research will require additional and sometimes new data, improved analytical methods, application of the methods, interpretation of the results, and thorough peer review of the new results before their release. Thus increased outputs from the FY 1999 initiative begins to occur in FY 2000 and will increase in succeeding years.

Verification and Validation: Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Goal 3: The nation's population is healthy and well-nourished.

Objective: Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of the factors affecting food prices and of the efficiency and effectiveness of alternative public policies and programs aimed at ensuring consumers equitable access to wide varieties of high quality food at affordable prices.

Program Activity: Economic Analysis and Research

	FY 1997	FY 1998	FY 1999	FY 2000
Funding (in thousands of dollars)	4,008	22,503	16,144	3,949
FTEs	43	42	40	40

	FY 1997	FY 1998	FY 1999	FY 2000
PERFORMANCE GOAL AND INDICATORS				
Provide policy makers, regulators, program managers, and organizations shaping public debate with timely and high quality analyses of economic issues affecting the nutrition and health of the U.S. population including factors related to food choices, consumption patterns at and away from home, food prices, food assistance programs, nutrition education, and food industry structure.				
Major reports, articles, papers, and briefings produced (no.)	48	43	55	65
Published research meets peer review standards (percent)	100	100	100	100
Requested analyses delivered by deadline (percent)	87	69	95	95

Discussion of Performance Goal: Achievement of this performance goal supports the achievement of USDA goals 2.1: Reduce hunger by assuring low-income household access to adequate supplies of nutritious food and 2.4: Improve dietary practices and promote a healthy, well nourished population through education and research. The ERS performance plan specifies parallel quantitative indicators for each of its performance goals. ERS will also use narratives in its annual performance report to demonstrate how ERS outputs enhanced understanding of economic issues related to healthy and affordable diets. Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Means and Strategies: To meet this performance goal, ERS will: identify key economic issues affecting food prices and food consumption patterns; use sound analytical techniques to understand the immediate and broader economic and social consequences of the changing structure of the food industry and of policies and programs aimed at ensuring consumers equitable access to affordable food; and effectively communicate research results to policy makers, program managers, and those shaping the public debate regarding healthy and affordable diets. Because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies are extensive and complicated. ERS's unique contribution is provision of *external economic analysis*. One example regarding this goal is ERS provision of economic analyses to national nutrition education, minority, and research activities which also involve the Food and Nutrition Service and FSIS.

The FY 1999 decline occurred when the appropriation for an extramural research on food stamps, WIC, and child nutrition was reduced from $18,495,000 in FY 1998 to $12,195,000. No additional staff years had been requested with these funds. The decrease in resources in FY 2000 occurs because the FY 1999 extramural funds for food stamps, WIC, and child nutrition research is proposed for the Food and Nutrition Service. No additional staff years were requested with these funds. Note that the effect of budget increases and decreases on output indicators occurs primarily in years after the budget change occurs. Research is not an instantaneous process. Lags develop as expanded research requires additional and sometimes new data, improved analytical methods, application of the methods, interpretation of the results, and thorough peer review of the new results before their release. Thus increased outputs from the FY 1998 extramural program will be evident in FY 1999 and FY 2000 despite the FY 1999 budget decline.

Verification and Validation: Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Goal 4: Agriculture and the environment are in harmony.

Objective: Enhanced understanding by policy makers, regulators, program managers, and those shaping public debate of the economic issues involved in balancing long term sustainability goals with improved agricultural competitiveness and economic growth and of the effects of Federal farm, natural resource, and rural policies and programs on that balance.

Program Activity: Economic Analysis and Research

	FY 1997	FY 1998	FY 1999	FY 2000
Funding (in thousands of dollars)	12,275	12,275	12,092	13,092
FTEs	132	128	121	121

PERFORMANCE GOAL AND INDICATORS	FY 1997	FY 1998	FY 1999	FY 2000
Provide policy makers, regulators, program managers, and organizations shaping public debate with analyses of economic issues affecting agriculture's interface with the environment including those related to integrated pest management, sustainability, biodiversity, global change, and environmental accounting.				
Major reports, articles, papers, and briefings produced (no.)	109	88	90	90
Published research meets peer review standards (percent)	100	100	100	100
Requested analyses delivered by deadline (percent)	80	88	95	95

Discussion of Performance Goal: Achievement of this performance goal supports the achievement of USDA goal 3: Promote sensible management of our natural resources. The ERS performance plan specifies parallel quantitative indicators for each of its performance goals. ERS will also use narratives in its annual performance report to demonstrate how ERS outputs enhanced understanding of economic issues related to natural resource management. Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Means and Strategies: To meet this performance goal, ERS will: identify key economic issues relating to interactions among natural resources, environmental quality, and agriculture; use sound analytical techniques to understand the immediate and broader economic and social consequences of alternative policies and programs to enhance environmental quality, especially on agriculture; and effectively communicate research results to policy makers, program managers, and those shaping the public debate regarding resource use and environmental quality. Because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies are extensive and complicated. One example of cooperation regarding this goal is ERS work with program managers in the Natural Resources Conservation Service (NRCS) and the Farm Service Agency (FSA) to support effective, efficient implementation of the Conservation Reserve, Wetlands Reserve, and the Environmental Quality Incentives Programs and the Water Quality Initiative. Such activities bring ERS staff in close cooperation with those of the Department of the Interior and the Environmental Protection Agency, as do ERS efforts to improve understanding the economics of integrated pest management and resource conserving production practices. ERS's unique contribution is provision of *external economic analysis*.

ERS supports the USDA Integrated Pest Management and Related Programs crosscut through its research on how economic issues affect farmers' choices among alternative pest managements practices and technologies. ERS supports the Invasive Non-Native Species crosscut by improved economic estimates of the risks posed by non-native weeds. For simplicity, the budget resources involved in supporting ERS research on economic issues relating to carbon sequestration are included under goal 1: a competitive agricultural system. The research also will improve understanding of the economic issues involved in ensuring an agricultural system in harmony with the environment. The necessary resources for FY 2000 include an increase of $700,000 for an initiative on climate change: economic incentives for carbon sequestration and trace gas emissions control in agriculture. The climate change economic incentives initiative anticipates the need for American farmers to control farm-related emission of greenhouse gases, and sequester carbon, and proposes path-breaking research on the approaches available to achieve this in ways that are most economically efficient and financially acceptable to the farm population. Strategies to control emissions from fossil energy use can affect agricultural competitiveness through changes in fossil energy prices and electricity. Research conducted under this initiative will contribute to the objectives of the White House Committee on Environmental and Natural Resources (CENR) Initiative for *Integrated Science for Sustainable Ecosystems.* Research will be primarily extramural; no additional staff years are requested.

The necessary resources for FY 2000 also include an increase of $300,000 for the ERS portion of a government-wide initiative on the U.S. Global Change Research Program (USGCRP) National Assessment Activities. ERS will help coordinate regional workshops that solicit regional concerns and research needs, will assist in quantitative analyses for the sectoral and regional assessments related to agriculture, and contribute to the comprehensive national synthesis report. ERS will work with other USDA agencies on assessment activities including ARS and NRCS. Research will be primarily extramural; no additional staff years are requested.

Verification and Validation: Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Goal 5: Enhanced economic opportunity and quality of life for rural Americans.

Objective: Enhanced understanding by policy makers, regulators, program managers, and organizations shaping public debate of economic issues affecting rural development and performance of all sizes of American farms.

Program Activity: Economic Analysis and Research

	FY 1997	FY 1998	FY 1999	FY 2000
Funding (in thousands of dollars)	13,027	13,027	12,833	13,033
FTEs	140	136	130	130

	FY 1997	FY 1998	FY 1999	FY 2000
PERFORMANCE GOAL AND INDICATORS				
Provide policy makers, regulators, program managers, and those shaping public debate with timely and high quality economic analyses that identify (1) how investments in rural people, businesses, and communities affect rural economies' capacity to survive and prosper in the global marketplace and (2) what policies and programs keep American farms of all sizes viable.				
Major reports, articles, papers, and briefings produced (no.)	149	113	100	100
Published research meets peer review standards (percent)	100	100	100	100
Requested analyses delivered by deadline (percent)	85	81	95	95

Discussion of Performance Goal: Achievement of this performance goal supports the achievement of USDA goal 1.3: Provide access to capital and credit to enhance the ability of rural communities to develop, grow, and invest in projects to expand economic opportunities and improve the quality of life for farm and rural residents. The ERS performance plan specifies parallel quantitative indicators for each of its performance goals. ERS will also use narratives in its annual performance report to demonstrate how ERS outputs enhanced understanding of economic issues related to rural development and farm viability. Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Means and Strategies: To meet this performance goal, ERS will: identify key economic issues relating to rural economic development and farm viability; use sound analytical techniques to understand the immediate and broader economic and social consequences of how alternative policies and programs and changing market conditions affect rural and farm economies; and effectively communicate research results to policy makers, program managers, and those shaping the public debate on rural economic conditions. Because ERS's economic analyses cover all aspects of USDA's mission, the crosscuts between ERS research and the missions and goals of other USDA agencies are extensive and complicated. ERS's unique contribution is provision of *external economic analysis*. One example regarding this goal is ERS's close involvement with the Cooperative State Research, Education, and Extension Service, the Rural Business-Cooperative Service, and the Rural Utilities Service on the Fund for Rural America and the Rural Community Enhancement Program.

The necessary resources for FY 2000 include an additional $200,000 to fund an interagency research activity to better assess the potential impacts of electric utility deregulation on the Department's rural utility loan programs, the competitive position of rural businesses and communities, the viability of alternative power generation systems,

and well being of rural customers. ERS, building on its data and expertise on rural industries, households, and communities, and economic models, will add expertise and information on the electric utility industry sufficient to model deregulation's effects on rural economies in various regions of the country and will analyze implications for the Department's rural utility loan programs. Research will be primarily extramural; no additional staff years are requested.

Verification and Validation: Please see discussion of ERS performance indicators verification and validation at the end of the plan.

Management Initiatives:

ERS administrative support is performed with ERS resources by the REE mission area's Administrative and Financial Management (AFM) staff in the Agricultural Research Service. ERS will cooperate with the AFM staff to ensure that USDA financial management requirements relating to internal control, cost accounting, and audited financial statements are completed.

Performance Indicators Verification and Validation:

Public and private decision makers routinely use ERS research findings provided through the outputs identified in the above tables to understand economic issues involving agriculture, food, natural resources, and rural issues. Quantitatively and definitively establishing the link that decision makers make particular decisions because of the provision of analyses is widely acknowledged as extremely difficult. The Army Research Laboratory formulated the following model to help explain how research performance can be evaluated.

Assessment measures	**Dimensions of performance**		
	Relevance	Productivity	Quality
Peer review	*1/*	*1/*	*1/*
Metrics	*1/*	*1/*	*1/*
Customer evaluation	*1/*	*1/*	*1/*
1/ Cell entries to be entered as ++ = very useful, +=somewhat useful, and o as less useful.			

ERS must provide quality, relevant, objective, and timely analyses to policy makers and program managers to successfully perform. In the annual performance report, ERS will use metrics to describe the volume, quality, and timeliness of major research outputs. ERS maintains records summarizing its outputs and their review prior to release and the due and completion dates of all requested analyses. These records will be used to provide actual numbers for the indicators. Simplistic reliance on quantitative output measurements can inhibit rather than contribute to successful outcomes. Care must be taken in setting and measuring against quantity output goals to ensure that quality is not sacrificed for quantity.

In the annual performance report, ERS will also include narratives covering characteristics of ERS output to demonstrate how ERS ensured policy makers, regulators, program managers, and organizations shaping public debate had high quality, objective, relevant, timely, and accessible analyses. The narratives will cover ERS anticipation of issues, accessibility of ERS analyses, and how ERS analyses contributed to informed decision making on economic issues related to agriculture, food safety, nutrition, natural resources, and rural development. The narratives will provide perspective on ERS success in bridging customer satisfaction measurement --e.g., responsiveness and courtesy shown to customers--with basic outcomes goals--e.g., improving the efficiency and effectiveness of policies and programs that meet societal equity standards. ERS narratives will include information such as: (1) call backs for follow up information/analysis from policy makers; (2) requests for ERS staff as primary speakers at important meetings/conferences; (3) articles in major public media that correctly and effectively use ERS analysis and data; (4) changes in legislation, regulation, and designs of social science programs related to agriculture, food, natural resources, and rural areas; and (5) innovations in dissemination systems including use of the Internet.

Interpreting the results of measurements against indicators is not a straight forward process. If ERS analysis is objective, analysis on the efficacy, efficiency, and equity impacts of specific policies, programs, and regulations will at any one time support some customers' proposals but not others. Analysis may show that an export

promotion program helps corn exporters at the expense of beef exporters. Research may show that a water allocation proposal costs farmers but benefits recreation interests. Corn exporters and farmers in such cases may not fully appreciate the relevancy, accessibility, and objectivity of ERS analysis. Rigorous adherence to standards of disciplinary excellence contributes greatly to the quality and objectivity of ERS analyses and their defensibility in the face of politically-motivated criticism.

SUMMARY OF ERS RESOURCES FOR FY 1999

(Dollars in Thousands)

	GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	TOTAL
Economic Analysis and Research	20,606 206 FTEs	3,291 36 FTEs	16,144 40 FTEs	12,092 121 FTEs	12,833 130 FTEs	64,966 533 FTEs

SUMMARY OF ERS RESOURCES FOR FY 2000

(Dollars in Thousands)

	GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	TOTAL
Economic Analysis and Research	21,810 206 FTEs	3,744 36 FTEs	3,949 40 FTEs	13,092 121 FTEs	13,033 130 FTEs	55,628 533 FTEs